

# What is Quality Assurance?

W.F. Vignoe, USAAVNC,  
Fort Rucker, AL  
DSN: 558-1431  
[Vignoe@rucker.army.mil](mailto:Vignoe@rucker.army.mil)

# Definition of Quality

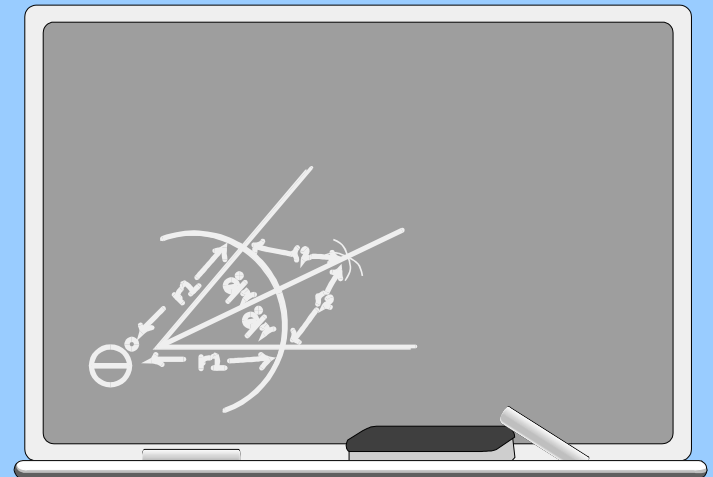
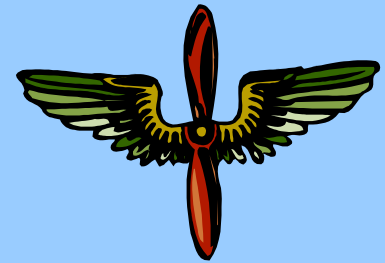
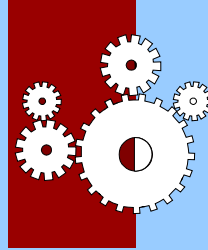
## Webster's Dictionary:

- Degree of excellence
- Inherent feature or property
- Peculiar or essential character
- Distinguishing attribute or characteristic



# Dimensions of Quality

- Features
- Uniformity
- Consistency
- Reputation
- Conformance to specifications



# Dimensions of Quality

- Performance
- Timeliness
- Reliability
- Durability
- Aesthetics
- Ease of use
- Accuracy



# Quality Depends On:

- The context in which it is used
- The customer's perception
- The needs and wants of the customer



# Conditions for Quality

- “The difficulty in defining quality is to translate **future needs of the user into measurable characteristics**, so that a product can be designed and turned out to give satisfaction at a price the user will pay.”  
Deming, 1986

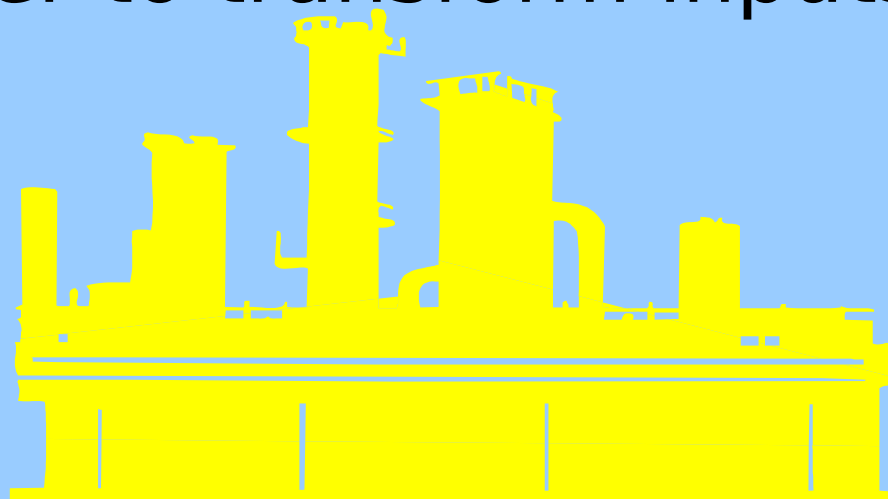
# Customer and End-User

- A customer is a person or group who uses the output of a process.
- An End-User is the ultimate user of a product or service.



# What Is a Process?

- A series of operations or steps that result in a product or service
- A set of causes and conditions that work together to transform inputs into outputs





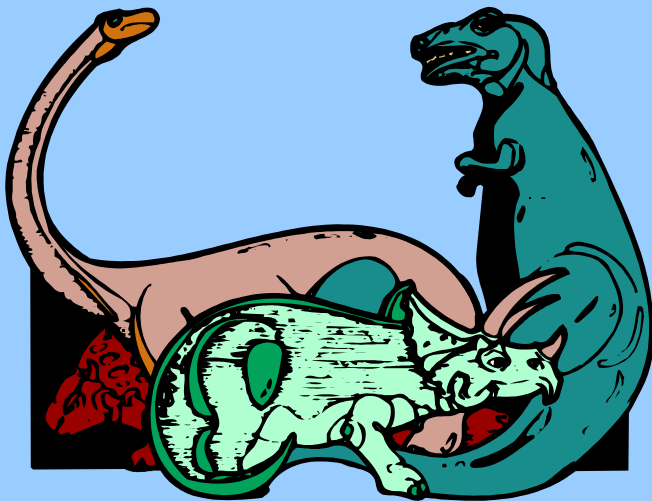
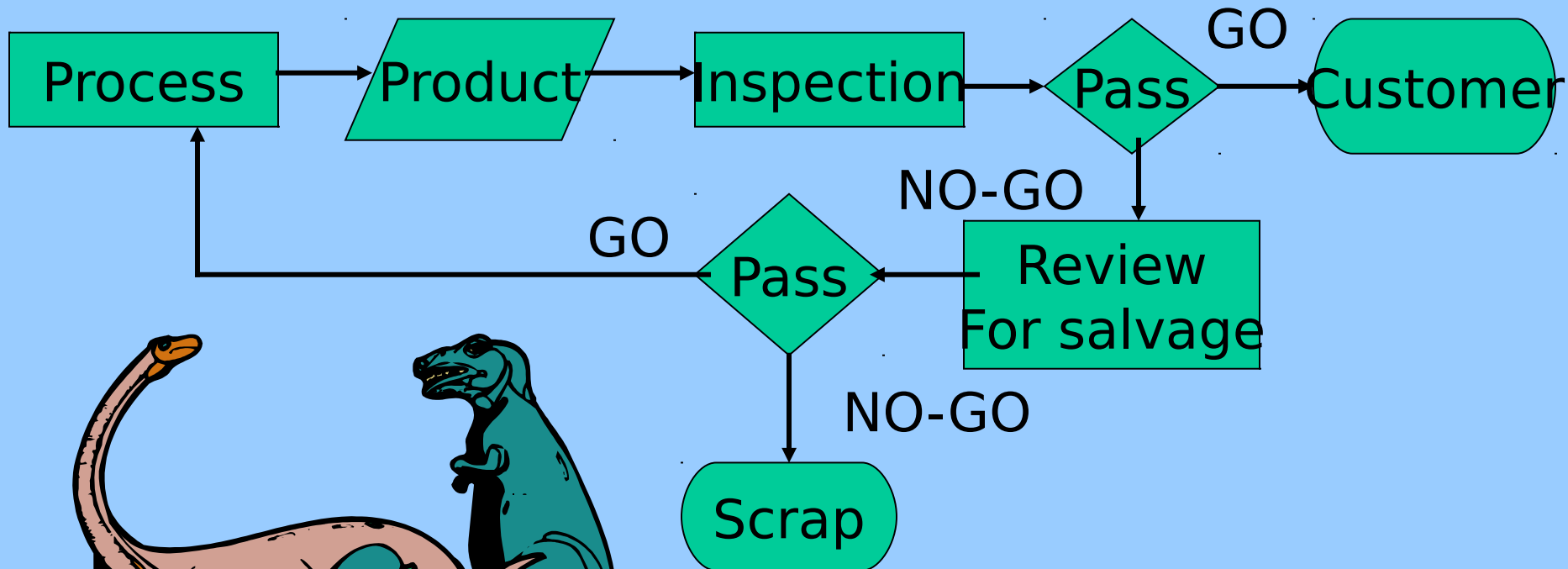
# Examples of Processes

- Maintaining TADSS
- Training Soldiers
- Systems Approach to Training
- Accreditation
- POI Review
- Internal/External Evaluation

# Two Approaches to Quality

- Quality through inspection
  - To detect and remove poor quality
- Quality through process improvement
  - To build in quality
  - Must have an extended systems view

# Quality Through Inspection

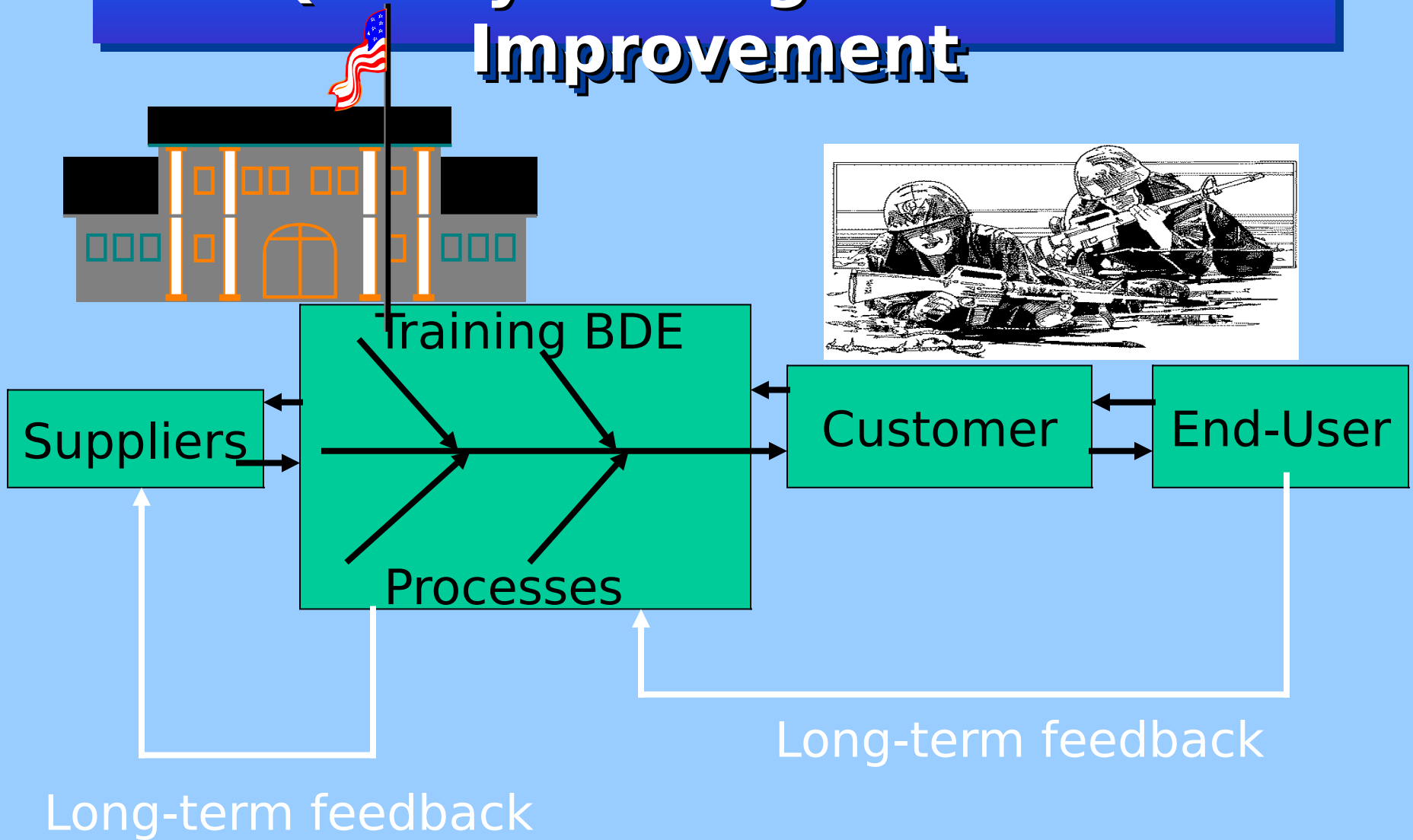


# Costs of Inspection

- Scrap and waste
- New material
- Time
- Delay
- Inspectors
- Employee burnout
- Unknowable costs



# Quality Through Process Improvement



# Process Improvement

- Requires a continual effort to learn about the cause system.
- Process improvement is not problem solving.



# Investments in Process Improvement



- Education and training
- Measurement and analysis
- Improving processes and systems
- Investment in innovation



# **Benefits of Focusing on Quality**

- Improves operational readiness of our armed forces
- Improves organizational efficiency and effectiveness



# **Benefits of Focusing on Quality**

- Eliminates waste, reduces costs, and increases productivity
- Enables everyone to make a meaningful contribution to their work

# Summary

- Quality has many dimensions and is difficult to define
- The customer defines quality
- Every product or service produced in the organization is the result of a process

# Summary

- Inspection belongs in the process not at the end
- We must have an extended systems view of our organizations

# Questions?

